

Applicants respectfully request that the claims in the continuation application be amended as follows:

Claims 1-40 (Cancelled)

Claim 41. (Currently amended) A process for increasing the yield of olefins from a Fischer-Tropsch plant which comprises:

- (a) contacting syngas with a Fischer-Tropsch catalyst under Fischer-Tropsch reaction conditions pre-selected to yield a Fischer-Tropsch product containing olefins ~~having an olefinicity of at least 20% by weight;~~
- (b) recovering separately from the Fischer-Tropsch product a Fischer-Tropsch wax fraction containing paraffins and a Fischer-Tropsch condensate fraction containing alcohols boiling below about 370°C;
- (c) raising the temperature the Fischer-Tropsch wax fraction sufficiently to vaporize the fraction;
- (d) ~~pyrolyzing steam cracking~~ the vaporized Fischer-Tropsch wax fraction in a thermal cracking zone ~~flow through reactor~~ under thermal cracking conditions pre-selected to achieve a cracking conversion of the paraffin molecules in the Fischer-Tropsch wax to olefins of greater than 30% by weight; ~~and~~
- (e) collecting from the thermal cracking zone an effluent comprising hydrocarbons boiling above about 260°C ~~and~~ having increased olefin content ~~from the flow through reactor; and~~

(f) contacting the Fischer-Tropsch condensate fraction with a dehydration catalyst in a dehydration zone under dehydration conditions selected to convert at least some of the alcohols present in said fraction into olefins and recovering an olefin-enriched Fischer-Tropsch condensate.

Claim 42. (Currently amended) The process of claim 41 wherein the temperature in the thermal cracking zone ~~flow-through reactor~~ is within the range of from about 510°C to about 870°C.

Claim 43. (Currently amended) The process of claim 41 wherein the pressure in the thermal cracking zone ~~flow-through reactor~~ is within the range of from about 0 atmospheres to about 5 atmospheres.

Claim 44. (Currently amended) The process of claim 43 wherein the pressure in the thermal cracking zone ~~flow-through reactor~~ is within the range of from about 0 atmospheres to about 2 atmospheres.

Claim 45. (Currently amended) The process of claim 41 wherein the residence time of the wax fraction in the thermal cracking zone ~~reactor~~ is in the range of from about 1.5 seconds to about 500 seconds.

Claim 46. (Currently amended) The process of claim 41 wherein the residence time of the wax fraction in the thermal cracking zone ~~reactor~~ is in the range of from about 5 seconds to about 300 seconds.

- Claim 47. (Currently amended) The process of claim 41 wherein the cracking conversion in the ~~flow-through reactor~~ thermal cracking zone of the paraffins in the wax fraction is greater than 50% by weight.
- Claim 48. (Original) The process of claim 47 wherein the cracking conversion in the thermal cracking zone of the paraffins in the wax fraction is greater than 70% by weight.
- Claim 49. (Currently amended) The process of claim 44 57 wherein the olefinicity of the Fischer-Tropsch condensate fraction is at least 40% by weight.
- Claim 50. (Original) The process of claim 49 wherein the olefinicity of the Fischer-Tropsch condensate fraction is at least 50% by weight.
- Claim 51. (Original) The process of claim 41 wherein the Fischer-Tropsch catalyst is an iron-based catalyst.
- Claim 52. (Original) The process of claim 41 wherein the effluent having increased olefin content recovered from the flow through reactor is passed to an oligomerization zone wherein the olefins are contacted with an oligomerization catalyst under oligomerization conditions and an oligomerization product having increased molecular weight as compared to the effluent is recovered.
- Claim 53. (Original) The process of claim 52 wherein the oligomerization product is used to prepare a lubrication base oil.

- Claim 54. (Currently amended) The process of claim 41 further including the step of removing any nonvaporized Fischer-Tropsch wax prior to ~~steam~~ cracking the vaporized Fischer-Tropsch wax in step (d).
- Claim 55. (Original) The process of claim 41 wherein the Fischer-Tropsch catalyst contains cobalt as an active metal.
- Claim 56. (Original) The process of claim 41 wherein the Fischer-Tropsch catalyst contains iron as an active metal.
- Claim 57. (New) The process of claim 41 wherein the olefinicity of the Fischer-Tropsch condensate fraction is at least 20% by weight.